Kearny Mesa
8.1.5

8.1.5.b *Miramar Landfill Easement (U North W 1-4)*

Site Description and Existing Conditions

The Miramar Landfill Easement (U North W 1-4) vernal pool site is located on 1,424 acres leased and managed by the City of San Diego Environmental Services Department. This area is located east of Interstate 805, west of Miramar Mounds National Natural Landmark, south of the MCAS Miramar airstrip, and north of State Route 52. Although on-site resources are fenced and signed for protection, the site is not considered conserved. It is not within the MHPA or the MSCP due to the underlying fee ownership of the U.S. military.

Approximately 24 vernal pools were recorded at Miramar Landfill, which are documented in the Vernal Pool Management Plan (City of San Diego, 1996). This site was not re-mapped during 2003 due to its occurrence outside the MSCP study area. Soils include loams from the Chesterton and Redding series. Upland vegetation is characterized by chamise chaparral and non-native annual grasses, and the vernal pools support populations of *E. aristulatum*, *P. abramsii*, and *B. sandiegonensis*.

Portions of this site are currently used as a landfill, while additional areas have been capped. The capped areas have been revegetated with coastal sage scrub, and large areas of the site burned in 2003.

Several management actions recommended by the City of San Diego Vernal Pool Management Plan (1996) have been accomplished. The 1996 document suggested suppression of dust and erosion control, monitoring/adjusting landfill operations, inspection of physical and biological conditions, and evaluation of restoration potential. These activities are conducted by staff biologists and resource managers at the Miramar Landfill.

Threats

Invasive Species

Non-native grasses are pervasive at this site, and have increased following the 2003 fires.

Fire/Fire Suppression

Miramar Landfill is adjacent to MCAS Miramar, which includes large undeveloped areas where fire plays an important part in the natural ecologic regime. Portions of the site burned most recently in 2003, and comparison of pre- and post-fire surveys at the nearby Mission Trails Regional Park site does not appear to reveal damage to sensitive species or their physical habitat. However, an increase in non-native annual grasses has been noted.

Trespass

As noted in the Vernal Pool Management Plan (City of San Diego, 1996), illegal trespass activities may disturb this area. Given the highly restricted access to military lands, this threat is relatively low compared to sites without similar fencing and patrols.

Development

As noted in the Vernal Pool Management Plan (City of San Diego, 1996), portions of the site were developed under the General Development Plan. There are no current plans for additional development that would impact vernal pools.

Emergency Procedures
As noted in the Vernal Pool Management Plan (City of San Diego, 1996), vernal pools may be impacted in the unlikely event of a crash landing at MCAS Miramar.

Siltation
As noted in the Vernal Pool Management Plan (City of San Diego, 1996), vernal pools near roadways may by impacted by siltation.

Current Management Activities

The site is currently managed for the use and safety of the Miramar Landfill by the Environmental Services Department of the City of San Diego.

Fencing and signage are maintained around the entire site to minimize trespass/disturbance to landfill operations, as well as location-specific signage and fencing for protection of environmentally sensitive areas, including vernal pools.

Siltation is addressed through a dust suppression program and best management practices for both construction and standard operations. These include scheduled wetting of surfaces, runoff control, silt fences and detention basins.

The Environmental Services Department has dedicated environmental staff, including biologists, to conduct monitoring, management, salvage and restoration projects as necessary at Miramar Landfill.

Access to the area supporting vernal pools is limited by the Water Department, which provides patrols, fencing, and signage.

Management Recommendations

The Vernal Pool Management Plan (City of San Diego, 1996) made the following recommendations: Continue dust suppression/erosion control programs, restore areas of impact in the event of an airplane crash, continue to monitor and adjust landfill operations as necessary at the recommendation of staff biologists, continue to inspect environmental/biological conditions and provide associated reports, restore disturbed areas when recommended by staff biologists, evaluate vernal pool restoration potential, evaluate expansion of the sludge processing site management plan to greater portions of the site, and notify appropriate City departments and entities if new development is proposed.

The first three recommendations are a continuation of existing practices, while the remaining issues refer to on-going evaluation of the site by staff biologist. Restoration of disturbed areas, where appropriate, and the minimization of disturbance from surrounding development should continue to be management priorities. To maintain the condition of the area, the site manager should continue to limit access through gates, fencing and patrols.

Restoration and reintroduction efforts should utilize seeds from within the smallest possible geographic range, in the following order, as necessary: complex, series, geographic region (i.e. Otay Mesa).

Non-native grasses have invaded much of the watershed area at Miramar. Enhancement and/or restoration efforts may benefit through inclusion of a weed eradication program to restore native species composition around the vernal pools.

This site was identified as necessary to stabilize the populations of *E. aristulatum*, *Pogogyne abramsii*, *Orcuttia californica*, and *Branchinecta sandiegonensis* by the adopted *Recovery Plan for Vernal Pools of Southern California* (USFWS, 1998). All management activities should promote the stabilization and recovery of these species.

Figure 26

Miramar Landfill Easement (U North, W 1-4)

Roads
MHPA
Conserved Lands
Vernal Pools at Site
Adjacent Vernal Pools
Coastal Sage Scrub
Chaparral
Disturbed Land
Urban/Developed
Military - No Data

0.1 Miles
0.25 Kilometers

Note: Vernal pools at this location not GPSed during the 2002-2003 Inventory Surveys.
Military vegetation data not available.
MHPA and Roads not shown in top map; vegetation mapping per Ogden 1997.

8.1.5.f *Montgomery Field (N 1-6)*

Site Description and Existing Conditions

This vernal pool site (N 1-6) is located on the grounds of the Montgomery Field Airport—544 acres located north of Aero Drive in Kearny Mesa. The site is owned and managed by the City of San Diego Airports Division and is partially within the MHPA. Montgomery Field is zoned for airports, and adjacent uses include roads and office buildings. Expanded development has been proposed and reviewed (e.g. Montgomery Field Master Plan Amendment [PTS 19212]), but the projects appear to be stalled at this time. A number of land use and conservation documents apply to this site: U.S. Fish and Wildlife Service Biological Opinion (1-6-94-F-32), *Montgomery Field Final Conceptual Mitigation Plan* (P&D Technologies 1994), *Vernal Pool Management Plan* (City of San Diego 1996), Mitigated Negative Declaration for the Champions Gold Range and Teaching Center (DEP #93-0448), Montgomery Field Runway Extension Project EIR (DEP #93-0423) and a master plan approved in 1980 (DEP #80-09-34).

In 2003, 276 vernal pools were mapped at Montgomery Field (6.425 acres [2.7 ha] total basin area) making this one of the largest natural vernal pool sites in the City. The vernal pool basins are underlain by Redding gravelly loam and Mima topography is apparent throughout the site. Upland vegetation is characterized by non-native grasslands and disturbed coastal sage scrub, and *P. abramsii* and *B. sandiegonensis* were both observed.

This site was identified as necessary to stabilize the populations of *P. abramsii, N. fossalis,* and *B. sandiegonensis* by the adopted *Recovery Plan for Vernal Pools of Southern California* (USFWS, 1998).

Threats

Development

Additional development may be proposed at Montgomery; for example, the Montgomery Field Master Plan Amendment under review in 2004 included an MHPA Boundary Line Adjustment. In addition, two heliports are being constructed in 2006. A portion of the site is protected from development *de facto* through airport navigational easements, which exclude structures, etc.

Maintenance Activities

The *Vernal Pool Management Plan* (City of San Diego, 1996) notes that impacts may occur from on-going maintenance operations such as mowing, weed abatement, pavement repair and special event parking.

Invasive Species

The site has been colonized by non-native plant species, including a high number of grasses. However, these species do not appear to have successfully colonized the vernal pool basins.

Trespass

Trespass is limited due to perimeter fencing and the high-security nature of airport operations.

Edge Effects

Edge effects such as litter and isolation may result in negative impacts. Litter is minimized through fencing, although some impacts continue to occur. The Serra Mesa Library site is located across Aero Drive from Montgomery Field, but does not support similar, sensitive species. However, the area and number of basins are expected to allow Montgomery Field to maintain or approach normal ecosystem function, even while located 0.45 km from site(s) with populations of sensitive species.

Fire Suppression and Emergency Procedures

This site has the potential to be impacted due to fire suppression and/or emergency procedures. The long-term impact of fire on vernal pool plants and animals appears to be minimal (see *Post Fire Evaluation of Vernal Pools* [City of San Diego MSCP Monitoring Report, 2004]). However, the airport, airplanes, and associated fuel and structures are a high priority during fire suppression and vernal pools may be impacted in the course of these activities. In addition, emergencies such as plane crashes and the associated life- and property-saving procedures may damage natural resources.

Current Management Activities

The site is currently managed for the use and safety of the Montgomery Field Airport, and includes fencing and patrols to minimize access. Herbicides are not used at Montgomery Field and a Storm Water Runoff Protection Plan is implemented by the Airports Division (City of San Diego, 1996).

In addition, U.S. Fish and Wildlife Service Biological Opinion 1-6-94-F-32 and the *Montgomery Field Final Conceptual Mitigation Plan* (P&D Technologies, 1994) include specific management requirements.

Management Recommendations

The *Vernal Pool Management Plan* (City of San Diego, 1996) recommended the following actions for Montgomery Field: Quarterly inspections of physical conditions, annual assessments of biological resources, restoration of disturbed areas, minimization of impacts from on-going maintenance activities, evaluation of the site for potential preservation and restoration opportunities, and notification of applicable agencies in the planning stages of future development proposals.

Existing management actions, including fencing and patrols, should be continued for the safety of airport operations and benefit to vernal pools. Field training sessions should be made available to airport personnel interested in natural resource management.

Assessments of biological resources should be conducted as needed; for example, following major disturbance to the site due to emergency response procedures, fire, etc.

If development is proposed, additional surveys shall be conducted to determine the presence or absence of vernal pools in the north-western portion of the site along Kearny Villa Road.

If an on-site vernal pool preserve is required as mitigation for future project(s), the area shall be within or adjacent to the MHPA and of sufficient size and shape to protect both vernal pool basins and all associated watersheds. The applicant shall coordinate with the Park and Recreation Open Space Division to initiate the process to dedicate the preserve as City open space prior to project approval.

If impacts to vernal pools are approved, the mitigation shall include vernal pool and watershed restoration as part of the preservation of on-site resources. In order to ensure long-term success, the mitigation shall include invasive species removal, fencing and signage, litter removal, monitoring and a fire and emergency management plan. It is recommended that an endowment be set aside for the management of all mitigation sites in perpetuity.

Permit access to the site for research opportunities, if consistent with use and safety procedures at Montgomery Field Airport.

Figure 30

Montgomery Field (N 1-6)

Roads
MHPA
Conserved Lands
Vernal Pools at Site
Adjacent Vernal Pools
Grassland
Disturbed Land
Urban/Developed

0.2
Miles
Kilometers
0.4

Note: MHPA and Roads not shown in top map; vegetation mapping per Ogden 1997.

8.15.g *Serra Mesa Library (N 7)*

Site Description and Existing Conditions

The Serra Mesa Library (N 7) site is located directly south of Montgomery Field Airport across Aero Drive. Twenty-five vernal pools (1470 m^2 [0.363 acres]) on 9.2 acres were mapped in the *Vernal Pool Inventory* (City of San Diego, 2004). These basins occur within the MHPA and were conserved as a condition of the Serra Mesa Library project (PTS 4813); the site owned by the City and managed by the Park and Recreation and Library Departments. The area is zoned Active Parks, and is bounded by a major road, residential development, and commercial and library facilities.

The vernal pools at Serra Mesa Library are of natural origin, and occur within Redding gravelly loam soils. Upland vegetation is primarily disturbed coastal sage scrub and ruderal. No sensitive vernal pool species were observed at Serra Mesa Library.

Prior to construction of the library, the site was occasionally disturbed by foot traffic and vehicle storage. The vernal pools and their watersheds have been conserved and fenced as part of the approved project.

Threats

Development

The Serra Mesa Library was constructed on this site (PTS 4813); the vernal pool basins and watersheds were conserved as a condition of the project.

Invasive Species

Chrysanthemum spp. and other non-native species occur in disturbed and ruderal portions of the Serra Mesa Library site.

Edge Effects/Trespass

The Serra Mesa Library vernal pools are bounded on all sides by development. Litter and unauthorized access are likely to occur. To minimize these impacts, fencing and regular trash removal were required as conditions of project approval for the Serra Mesa Library (PTS 4813).

Fire and Fire Suppression

Given the developed surroundings, it is unlikely that wildfire or fire suppression activities pose a threat to the Serra Mesa Library vernal pools.

Required Management Activities

The current management activities discussed in this section were conditions of project approval for the Serra Mesa Library project (PTS 4813).

Prior to on-site grading, a permanent fence, made of non-combustible material (i.e. chain link) and six feet in height, shall be installed around the vernal pools. Signage will be installed identifying the sensitive nature of the habitat; the Library Department is responsible for keeping the fenced area free of trash and debris.

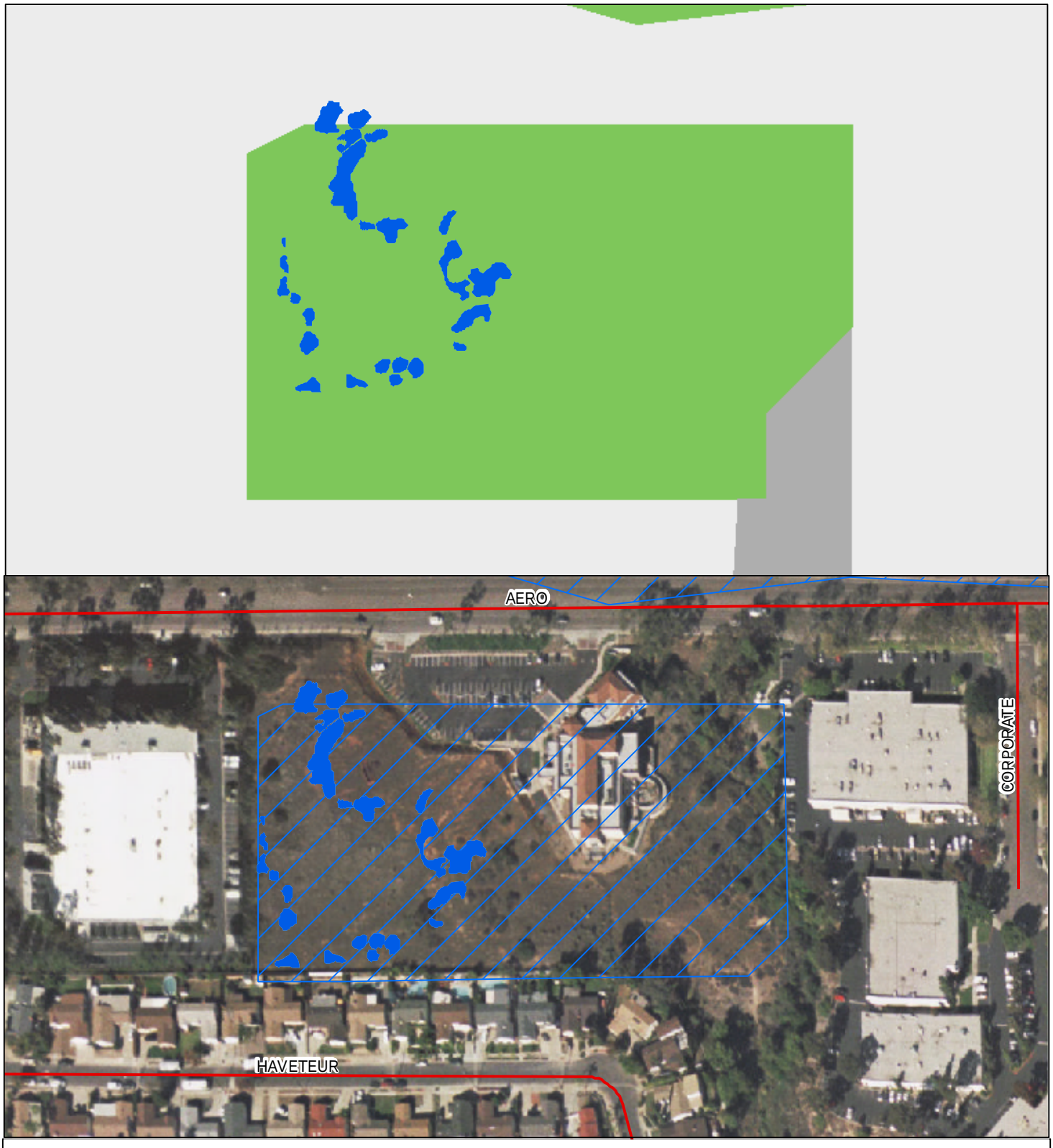
When maintenance to the brush management zone two is required, a biologist shall notify the City of San Diego's Environmental Review Manager of the maintenance and identify the biological monitor; the biologist shall be present to ensure that vernal

pool basins or watershed are not impacted. After the brush management maintenance is complete, the biologist shall submit a letter to the Environmental Review Manager to disclose any unanticipated impacts or recommend needed mitigation measures.

Management Recommendations

The Land Manager should encourage research studies, including projects to assess the impact of edge effects and isolation on vernal pool habitats and their associated species. This site may be an appropriate location for environmental education due to the nearby library.

Figure 31



Serra Mesa Library (N 7)

0.03
Miles
Kilometers
0.08

Roads
MHPA
Conserved Lands
Vernal Pools at Site
Adjacent Vernal Pools
Grassland
Disturbed Land
Urban/Developed

Note: MHPA and Roads not shown in top map; vegetation mapping per Ogden 1997.